



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,954	02/11/2002	Hiroo Arikawa	2002_0228A	2375

513 7590 10/21/2003

WENDEROTH, LIND & PONACK, L.L.P.  
2033 K STREET N. W.  
SUITE 800  
WASHINGTON, DC 20006-1021

EXAMINER

VORTMAN, ANATOLY

ART UNIT PAPER NUMBER

2835

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/068,954

Applicant(s)

ARIKAWA ET AL.

Examiner

Anatoly Vortman

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2003 (Election).
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-8 and 10-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.                      6) ☐ Other:

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of claims 5-8 (Group II) in Paper No. 6 is acknowledged. Because Applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The new claims 10-12 which have been added by Preliminary Amendment filed on 02/11/02 (Paper No. 5A) are also included in Group II, because of their dependency from independent claim 5. Thus, claims 5-8 and 10-12 are at issue in the instant application.

Non-elected claims 1-4 and 9 have been withdrawn from further consideration on the merits.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5-8 and 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, because claim 5 recites the limitations "the split end surface" and "the side surfaces". There is insufficient antecedent basis for these limitations in the claim.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 5-7 and 10, as best understood, are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US/1,377,398 to Conrad.

Regarding claims 5-7 and 10, Conrad disclosed (Fig. 1-9) precisely identical fuse structure as recited in claim 5, including split members (B, B) of a main body (A) of the fuse and recessed portions extending to the split end surfaces of the main body (A) in the vicinities of the respective end portions of the side surfaces of said split members (B,B), forming a columnar configuration of said main body (A), wherein conductive cap terminals (E), each having projections (Fig. 7) are fitted on the respective end portions of the main body (A) so as to allow said projections to fit into said recessed portions (Fig. 4, 6).

Regarding the connection method (i.e. welding) recited in claims 7 and 10, please note, that the method of forming the device is not germane to the issue of patentability of the device itself. Even though the claim is limited by and defined by the recited process (i.e. welding), the determination of patentability of the product is based on the product itself, and does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product

Art Unit: 2835

was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore, these limitations (i.e. welding) have not been given patentable weight.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conrad ('406) in view of US/5,214,406 to Reese et al., (Reese).

Regarding claims 8, 11, and 12, Conrad disclosed all of the claims limitations as apply to claims 5, 6, and 7, respectively, but did not specify that said main body is made of ceramic material.

Reese disclosed a fuse (Fig. 3) having a main body (10) made of ceramic material (column 5, lines 63+).

Since inventions of Conrad and of Reese are from the same field of endeavor, the purpose of the ceramic material used for fabrication of the main body of Reese would be recognized in the invention of Conrad.

It would have been obvious to a person of ordinary skill in the fuse art at the time the invention was made to use ceramic material for fabrication of the fuse main body of Conrad as

Art Unit: 2835

taught by Resee, in order to enhance insulation and arc-quenching properties of the fuse of Conrad.

Alternatively, the Official Notice is taken of the fact that ceramic materials have been notoriously known and widely used in the fuse art at the time the invention was made for fabrication of electrically insulative components of fuses, specifically for making fuse housings.

Therefore, it would have been obvious to a person of ordinary skill in the fuse art at the time the invention was made to use ceramic material for fabrication of the fuse housing of Conrad, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure:

US/4851805, 4703299, 5153553, and FR/2679378 disclosed fuses with split housings.

US/5280261, 6507265, 3460086, 4684915, 4656453, 3721936, and 4158187 disclosed fuses having recesses formed on the fuse housing external surfaces.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anatoly Vortman whose telephone number is 703-308-7824.

The examiner can normally be reached on Monday-Friday, between 9:30am and 6:00 pm..

Art Unit: 2835

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg can be reached on 703-308-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

A.V.

A handwritten signature in cursive script, appearing to read "A. Vortman", followed by a horizontal line.

Anatoly Vortman  
Primary Examiner  
Art Unit 2835